

AMENDMENT NO. 2
TO
AGREEMENT FOR
ENGINEERING CONSULTING SERVICES
CONTRACT NO. 300455/300456
FEDERAL PROJECT NO. BHLS-5949(137) / BHLS-5949(136)

This Amendment No. 2 executed this _____ day of _____, 2015, to the AGREEMENT made by and between the COUNTY OF SAN LUIS OBISPO ("COUNTY") and Drake Haglan and Associates, Inc., ("ENGINEER") on September 25, 2012, hereby amends said agreement as follows:

1. Under Article 2, Time for Completion of Work, of said AGREEMENT, the time for completion of the work is changed from "December 31, 2014" to "March 30, 2018".
2. Under Article 3, Payment for Services, of said AGREEMENT, is hereby amended as follows:

- a. Paragraph A.1 is hereby replaced with the following:

The COUNTY shall pay to ENGINEER as compensation in full for all work described in this Agreement a total sum not to exceed \$577,976.03. This sum includes the fixed fee amount described in Article 3.A.3 below.

- b. Paragraph A.3, the fixed fee is changed from "\$18,562.20" to "\$37,663.41".
 - c. ENGINEER and COUNTY acknowledge that the not-to-exceed sum of \$577,976.03 includes \$334,077.27 in payments already made to ENGINEER for determination of seismic retrofit strategies for the South Bay Boulevard and Avila Beach Boulevard seismic retrofit projects. ENGINEER shall perform all Work (including implementation of the Avila Beach Boulevard retrofit strategy, in addition to the determination of said retrofit strategies) for a total sum not to exceed \$577,976.03.
3. Under Article 25, Notices of said AGREEMENT, "Mr. Paavo Ogren, Director" is changed to "Kidd Immel, Project Manager".
4. In the ENGINEER's Scope of Work, Exhibit A2 of said AGREEMENT, insert the additional Scope of Work described in the Exhibit A3 attached hereto, entitled "Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Scope of Services".
5. In the ENGINEER's Cost Proposal, Exhibit B2 of said AGREEMENT, insert the additional Cost Proposal described in the Exhibit B3 attached hereto, entitled

"Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Cost Proposal".

6. In the ENGINEER's Organizational Chart, Exhibit C of said AGREEMENT, insert the additional Organizational Chart shown in the Exhibit C2 attached hereto, entitled "Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Organizational Chart".
7. In the ENGINEER's Schedule, Exhibit D2 of said AGREEMENT, insert the additional Schedule described in the Exhibit D3 attached hereto, entitled "Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Schedule".

Deliverable submittals shall be as follows:

- a. Area of Potential Effect Map shall be submitted within 2 months after receipt of the County's Notice to Proceed (NTP).
 - b. 65% Plans, Specifications, & Estimate (PS&E) shall be submitted within 5 months after receipt of the County's NTP.
 - c. Final PS&E shall be submitted within 24 months after receipt of the County's NTP.
8. The effective date of the Amendment No. 2 is immediate upon complete execution by all of the parties.
 9. All provisions of the Agreement not affected by this Amendment No. 2 shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, this Amendment No. 2 is hereby entered into by the parties hereto, upon the date shown sign by the County of San Luis Obispo.

COUNTY OF SAN LUIS OBISPO

Chairperson of the Board of Supervisors
of the County of San Luis Obispo

Date: _____

ATTEST:

County Clerk and Ex-officio Clerk
of the Board of Supervisors of the
County of San Luis Obispo

By: _____
Deputy Clerk

Date: _____

Drake Haglan & Associates, Inc.

By: Cy C. DL

Title: CFO

Date: 3/11/15

APPROVED AS TO FORM AND LEGAL EFFECT:

RITA L. NEAL
County Counsel

By: [Signature]
Deputy County Counsel

Date: 3/16/15

EXHIBIT "A3"

COUNTY OF SAN LUIS OBISPO DEPARTMENT OF PUBLIC WORKS

IMPLEMENTATION OF RETROFIT STRATEGY FOR AVILIA BEACH DRIVE BRIDGE AT SAN LUIS OBISPO CREEK

SCOPE OF SERVICES

This Scope of Services is for the final PS&E package for the Seismic Retrofit of the Avila Beach Drive Bridge over San Luis Obispo Creek (Bridge No. 49C-0327) in accordance with the approved seismic retrofit strategy report dated February 26, 2014. This scope assumes that the approved seismic retrofit strategy report describes in general the retrofit measures that will be applied to the existing bridge.

PROJECT DESCRIPTION

Perform design of the seismic retrofit elements as described in the Caltrans approved retrofit strategy dated February 26, 2014 on the existing bridge. Retrofit work will be scheduled to provide two lanes of traffic during peak travel times and on weekends. Off-peak temporary lane closures may be required to facilitate work performed at abutments and deck overlay; however, one lane of traffic must be available at all times. The seismic retrofit elements includes cable restrainers and strengthening at hinges and abutments, a new approach slab at Abutment 9, and removal and replacement of unsound concrete at Pier 2 and 3. This works also includes removal and replacement of existing AC overlay with new polyester concrete overlay.

The intended outcome is for the CONSULTANT to provide the COUNTY with bridge plans, specifications, and cost estimate (PS&E) package suitable for the advertising, bidding, and construction of the bridge seismic retrofit project. The CONSULTANT shall perform professional services necessary to prepare project plans, specifications, and estimates. The PS&E package shall meet all State and COUNTY requirements in conformance with the Federal Highway Administration's Highway Bridge Program (HBP).

ITEMS OF WORK

The following CONSULTANT services are needed to engineer and produce the final construction documents for the Seismic Retrofit of the Avila Beach Drive Bridge over San Luis Obispo Creek. Applicable requirements of the environmental mitigation measures will be incorporated into the plans and specifications.

The CONSULTANT shall prepare the construction plans, specifications, and engineer's cost estimate in English units and in accordance with requirements of Caltrans' LAPM and LAPG, and the latest editions from the following design standards and design criteria:

- San Luis Obispo COUNTY 2011 Public Improvement Standards
- A Policy on Geometric Design of Highways and Streets
- Caltrans Highway Design Manual
- Caltrans Traffic Manual
- Special Policies amending the Traffic Manual by Caltrans District 5
- Caltrans Standard Plans and Specifications (2010)
- Caltrans Standard Special Provisions (2010)
- AASHTO LRFD Bridge Design Specifications w/ Caltrans Amendments
- Caltrans Seismic Design Criteria

- Seismic Performance (MTD 20-1): Ordinary category, safety level evaluation, no-collapse criteria
- Caltrans Bridge Details Manual
- Caltrans Bridge Design Aids Manual
- Caltrans Bridge Memos To Designers
- Caltrans Local Assistance Procedures and Guidelines Manuals

The Retrofit measures used to determine this scope of services is in accordance with the final Caltrans approved Seismic Retrofit Strategy Report dated February 26, 2014.

All deliverables/products below will be provided in PDF format, electronic source file, as well as hard copy per COUNTY and Caltrans practice. Electronic files (MS Word, MS Excel, AutoCAD, Civil 3D, MS Project, etc.) will include all supporting files and will be provided to COUNTY in a readily usable format. Plans will be prepared in AutoCAD and Civil 3D.

For each submittal review, the COUNTY will prepare a consolidated written list of comments and notations. The CONSULTANT shall address comments, changes and/or corrections obtained from the COUNTY review comments on the final submittals. If the comments are not incorporated, the CONSULTANT shall address why the comments were not incorporated.

Plan hardcopy size shall be tabloid size (11x17). Pdf files will be true to the original and be plotted directly to pdf (in lieu of scanning or photo imaging) whenever possible. Full size drawings will be 22x34 size plotted on 24x36 paper. Consultant shall provide hardcopies in the size and number that is requested by County in accordance with the cost and rates set forth in the Contract fee schedule.

SCOPE ASSUMPTIONS:

- Project duration through Final PS&E is 30 months.
- No coordination with State or Federal right-of-way departments, other than specifically listed in scope.
- Excepting tasks listed as "OPTIONAL", the actual costs may differ from task to task from that proposed in the fee, but the overall fee will not be exceeded unless additional work is requested and approved by the COUNTY, and fee for any such additional work will be negotiated prior to work being performed.
- COUNTY will establish mailing lists for public notices and CONSULTANT shall distribute project announcements.
- All application fees required by resource agencies are the responsibility of the COUNTY
- CONSULTANT shall submit number of reviews and revisions as necessary to attain Caltrans, County, and/or resource agency approval.
- Work during this final design phase will continue from the previous phase findings and recommendations contained in the final seismic retrofit strategy report and the current approved PES form and PES transmittal letter.

SERVICES TO BE PROVIDED BY COUNTY:

The services to be provided by the COUNTY shall include, but not necessarily be limited to:

- Lead correspondence and coordination with Caltrans
- California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents.
- Land surveying and topographical mapping (If necessary)
- Utility coordination
- Right-of-way maps with right-of-way lines on the topographic maps (If necessary)

- Bridge Hydraulic Report (if necessary)

SERVICES TO BE PROVIDED BY CONSULTANT:

Project design and related engineering services shall include the following tasks:

PHASE 1: PRELIMINARY ENGINEERING

TASK 1 – PROJECT MANAGEMENT

Task 1.1 – Project Management

CONSULTANT will manage the project by tracking the schedule, budget and value of the products produced. CONSULTANT will create and maintain an "action item log" for the project, which will include each required action encountered, the responsible decision-maker for that action, and the date the decision was made or action taken. This "action item log" will be transmitted to the COUNTY on a regular basis.

Task 1.2 – Progress Meetings

CONSULTANT Project Manager and appropriate staff will meet with the COUNTY Project Manager and others as necessary to manage and deliver this project. For purposes of this scope, a total of 4 meetings at the COUNTY offices are assumed for Phase 1. Additional team meetings will be scheduled via telephone monthly to keep the COUNTY informed of the status of the project and to gain timely decisions from the COUNTY.

DELIVERABLES:

- Progress Reports with Issues Log
- Regularly Updated Project Schedule
- Meeting Agendas and Notes

TASK 2 – PROJECT INITIATION

Task 2.1 – Kick-Off Meeting

CONSULTANT will coordinate with the COUNTY to hold a project kick-off meeting for the project and will include the CONSULTANT, COUNTY, and other identified stakeholders. The project background, scope, concepts, schedule, management, and previously completed work will be thoroughly discussed. The meeting will result in an understanding by the parties involved of the scope, schedule and general elements of the retrofit project.

Task 2.2 – Surveys and Mapping (By COUNTY)

Due to the nature of the seismic retrofit, the need for base mapping and digital terrain models is not anticipated at this time. However, if surveying is needed this will be provided by the COUNTY. CONSULTANT will then provide a survey request to the COUNTY, which includes project limits to be mapped that includes a checklist of criteria for the engineering.

Task 2.3 – Hydrology and Bridge Hydraulic Report (By COUNTY)

Due to the nature of the seismic retrofit, the need for a bridge hydraulic report is not anticipated. If needed, hydraulic information for the bridge design according to Chapter 11.2 "Drainage" of the LAPM will be provided by the COUNTY, including any recommendations for pier or bank scour protection. A Location Hydraulic Study and Summary Floodplain Encroachment Report will be provided by the COUNTY. No

additional hydraulic information or study by CONSULTANT is anticipated. CONSULTANT to evaluate impacts to the bridge from potential sea level rise and a tsunami event, and will provide the COUNTY with the conclusions for inclusion into the appropriate reports. Design of countermeasures for sea level rise and tsunami are not included in this project.

DELIVERABLES:

- Kick-Off Meeting Minutes
- Survey Request (If necessary)

TASK 3 – ENVIRONMENTAL SUPPORT

Since the project is federally funded and the funding will be administered by Caltrans, the project will be subject to FHWA and Caltrans requirements. It is anticipated that the NEPA environmental documentation would be a Categorical Exclusion (CE) supported by technical studies if no significant environmental impacts are determined to result from the proposed Project. This scope assumes the County will perform the studies and prepare the NEPA documents required for Caltrans to make the CE finding. If an adverse effect is identified, an Environmental Assessment (EA) may be required to satisfy NEPA.

The COUNTY will be the lead CEQA agency during the preparation of the CEQA environmental document. It is anticipated that the necessary environmental document will be an Initial Study/Mitigated Negative Declaration (IS/MND). The COUNTY will prepare the environmental document.

CONSULTANT shall coordinate with and review work for conformance with the project design that is prepared by the County and/or the County's environmental consultant. CONSULTANT to provide an Area of Potential Effects (APE) map and Project Description for use in the environmental documents.

CONSULTANT to prepare a memorandum that will address traffic impacts in the project vicinity due to traffic control during project construction. The memo will utilize existing traffic data to qualitatively describe the impacts to traffic in the vicinity of the project, including any restrictions on traffic control due to projected traffic patterns from the PG&E Diablo Canyon facility. The memo will also address temporary parking impacts during construction. The memorandum will also identify and address any proposed construction staging areas.

DELIVERABLES:

- Area of Potential Effects Map
- Project Description

TASK 4 – PUBLIC OUTREACH

Task 4.1 – Public Outreach

CONSULTANT shall assist COUNTY with implementation of its public outreach plan. The CONSULTANT will attend and conduct 1 public meeting and prepare exhibits and project descriptions as may be requested by COUNTY. At the request of the COUNTY, the CONSULTANT will incorporate and/or respond to information or questions received from the public.

TASK 5 – PRELIMINARY UTILITY COORDINATION

Task 5.1 – Preliminary Utility Coordination

COUNTY shall perform utility coordination with affected utilities, including "A", "B" and "C" letters.

CONSULTANT shall identify locations of potential conflicts (including mapping of any potholing needed). CONSULTANT's design shall consider utilities for avoidance, and identify conflicts that cannot be avoided. CONSULTANT shall identify any required pot-holing and survey activities to verify utility locations and potential conflicts. COUNTY shall provide CONSULTANT the subsequent survey data and field notes to CONSULTANT, CONSULTANT shall incorporate utility data and information obtained from the utilities and COUNTY into the project base mapping and project documents.

CONSULTANT shall coordinate with County on potential utility removals and relocations that may occur during the bridge retrofit construction project, and make necessary accommodations in the project's PS&E as may be required.

TASK 6 – GEOTECHNICAL ENGINEERING

The geotechnical work includes review of previous reports and field investigations; a field exploration and laboratory testing program; and analysis to support the preparation of a letter addressing rock anchors at Abutment 1, soil anchors or deadmen at Abutment 9, and any required soil strengthening at Abutment 9.

Task 6.1 - Pre-field Activities

Since field activities are limited to hand auger samples within existing COUNTY right-of-way, no new permits will be required.

Task 6.2 - Field Exploration Program

Perform hand exploratory borings in the existing fill materials near Abutment 9. Exploration depths are anticipated to extend to about 5 feet. Maintain a log of the soils encountered and obtain samples for visual examination, classification, and laboratory testing. The borings will be backfilled with excavated soil cuttings upon completion. Obtain 4 to 5, 2-inch diameter cores from bedrock exposures around Abutment 1.

To confirm concrete condition of the core concrete at Piers 2 and 3, a 4-inch concrete core (1 core each pier) through the concrete jacket and 4 inches into the pier will be obtained. The cores will be tested for Alkali Silica Reaction and a report submitted.

Task 6.3 - Laboratory Testing Program

Laboratory testing will be performed to evaluate the bond strength of bedrock at Abutment 1 and certain characteristics of the existing fill soils at Abutment 9. Typical tests can include:

- Direct shear strength of remolded soils, ASTM D3080
- Unconfined Compression of rock, ASTM D2938
- Maximum dry density and optimum moisture of typical soil (ASTM D 1557)

Task 6.4 - Engineering Analysis and Report Preparation

After the additional field and laboratory phases are complete and based on engineering evaluation and analysis of the entire (including previous) field and laboratory data program for the project, a draft Foundation Report will be prepared, followed by a final Foundation Report once all review comments have been received.

The report will follow basic Caltrans LRFD guidelines and the revised Caltrans Foundation Report Preparation for Bridge Foundations. The FR will present comments and recommendations to aid in design of the bridge. Appropriate data and analyses from the previous preliminary geotechnical evaluation will be utilized and incorporated into the FR. It is anticipated that the following specific items will be included in the FR:

- A description of the proposed project.
- Discussion of the field and laboratory testing programs.
- Comments on the regional geology and site engineering seismology, including the potential for liquefaction and associated effects (seismically induced settlement and lateral spread.)
- Recommended peak ground acceleration and ARS curve based on Caltrans Seismic Design Criteria 1.7.
- Results of liquefaction and lateral spreading analysis
- Comments on the axial capacity of existing foundations.
- Recommended parameters for LPILE profile.
- Comments on soil stiffness and ultimate equivalent lateral pressure for resisting dynamic loading of abutment walls, including rock anchor capacity at Abutment 1 and passive restraint at Abutment 9.
- Recommended foundation springs to represent existing foundations for use in evaluating the inertial response of structure for liquefied and non-liquefied conditions.
- Recommendations for pavement sections based on a furnished Traffic Index.
- Comments on the corrosion potential of foundation soil.
- Log of Test Boring drawings suitable for inclusion into the contract drawings.

DELIVERABLES:

- ASR Testing Report
- Draft Foundation Report
- Final Foundation Report
- Log of Test Borings (LOTB)

TASK 7 – 65% DESIGN

Task 7.1 – 65% Roadway Design

Prepare the roadway civil design to conform to the approved final retrofit strategy report. The Title Sheet will include the appropriate COUNTY and federal funding project identification, as well as an index to plans, a vicinity map, the project legend, general notes, project control points, and appropriate signature approval blocks.

Task 7.2 – 65% Bridge Retrofit Design and Detailing

The seismic retrofit work will be based on the final seismic retrofit strategy report dated February 26, 2014. Any bridge design elements will be in accordance with the "AASHTO LRFD Bridge Design Specifications", Sixth edition with the latest version of Caltrans amendments and applicable sections of the Caltrans Bridge Memos to Designers and Bridge Design Aids manuals. The design will meet COUNTY, Caltrans and FHWA standards. Seismic design will be performed in accordance with latest edition of the Caltrans Seismic Design Criteria.

Detailing of plans will be in accordance with Caltrans Bridge Design Details manual. Both the design and detailing will be based on the use of the latest COUNTY

Standards and Caltrans Standard Plans and Standard Specifications. All details will be checked by the bridge design engineer.

Task 7.3 – Traffic Design

Traffic staging plans will be prepared to delineate traffic controls for each stage of construction. A Construction Area Signs sheet will be prepared for the project, including signs for each stage of construction. The plan will delineate the staging using appropriate advisory and construction area signs (CAS) as approved by the COUNTY.

A signing, striping, and pavement marking plan will be developed utilizing COUNTY standard details. Existing as well as new sign locations will be shown. Sign panels will be shown for any nonstandard signs. Standard signs will be designated by appropriate Caltrans standard sign numbers. Temporary signing and striping, portable delineators, temporary crash cushion arrays and temporary railing (Type K) will be shown, as necessary. CONSULTANT staff will work closely with the COUNTY Traffic Engineer to incorporate applicable requirements into the plan set.

Task 7.4 – Design Exceptions

CONSULTANT will prepare any project design exceptions to FHWA's 13 controlling criteria for approval by COUNTY. No exceptions are anticipated for this project.

Task 7.5 – Dewatering Plans and Water Pollution Control

CONSULTANT to develop a conceptual stream dewatering plan for work within the creek. Prepare a plan sheet for minimum BMP's required for Water Pollution Control.

PHASE 2: FINAL DESIGN

TASK 8 – PROJECT MANAGEMENT

Task 8.1 – Project Management

The Project Management task includes the time needed to manage the flow of work through the project team. It is a continuation of the Phase 1 PM task.

Task 8.2 – Progress Meetings

CONSULTANT Project Manager and appropriate staff will meet with the COUNTY Project Manager and others as necessary to manage and deliver this project. For purposes of this scope, a total of 2 meetings at the COUNTY offices are assumed for Phase 2. Additional team meetings will be scheduled via telephone monthly to keep the COUNTY informed of the status of the project and to gain timely decisions from the COUNTY.

TASK 9 – RIGHT-OF-WAY

Task 9.1 – Preliminary Right-of-Way Assessment

Right-of-way impacts at the site will be assessed during the 65% design phase. Permanent right-of-way acquisitions are not anticipated. Temporary construction easements, if needed, will be delineated and used for updating the project cost estimate at the 65% submittal. CONSULTANT will identify any temporary easements or permanent right-of-way takes needed to construct the project. CONSULTANT will prepare an exhibit in AutoCAD showing the right-of-way limits for the project.

Task 9.2 – Right-of-Way Engineering (By COUNTY)

The COUNTY will prepare the Plats and Legals and other exhibits (for TCEs) as needed for acquisition. The COUNTY will perform all appraisals and acquisitions for the project.

DELIVERABLES:

- Preliminary Right-of-Way Data (If necessary)
- Right-of-Way limits for use by COUNTY (If necessary)

TASK 10 – UTILITIES

Task 10.1 – Utility Conflict Coordination

Upon completion of the 65% plans, CONSULTANT will identify impacted utility facilities within the project limits, and will provide conflict maps for each impacted facility to the COUNTY. It is assumed that all new or relocated utility facilities will be designed and constructed by the applicable utility owners.

Task 10.2 – Utility Notice to Owners (By COUNTY)

COUNTY will prepare draft Notice to Utility Owners letters for transmittal to each affected utility.

CONSULTANT shall coordinate with County on potential utility removals and relocations that may occur during the bridge retrofit construction project, and make necessary accommodations in the project's PS&E as may be required.

DELIVERABLES:

- Utility Conflict Maps

TASK 11 – 65% PLANS SUBMITTAL

Task 11.1 – 65% Plans Submittal

CONSULTANT shall prepare and submit the 65% retrofit plans to the COUNTY. A preliminary contract bid item list will be prepared, as well as an updated General Plan estimate reflecting any significant changes from the approved Seismic Retrofit Strategy report. CONSULTANT will perform an independent QA/QC review of the 65% plans and incorporate appropriate revisions prior to submittal to the COUNTY. Upon receipt of COUNTY comments on the 65% plans submittal, CONSULTANT will review and incorporate applicable revisions into the design and will submit the response to 65% comments with the 90% submittal.

DELIVERABLES:

- Plans
- Contract Items List
- Updated Estimate

TASK 12 – BRIDGE DESIGN CHECK

Task 12.1 – Bridge Design Check

Upon completion of the 65% submittal and after NEPA certification, CONSULTANT will perform an independent design check of the 65% bridge retrofit plans in conformance with usual Caltrans bridge design procedures. A Bridge engineer will

develop their own calculations, computer runs, etc., to check the retrofit design and details. A plan check set is marked indicating approved items and those that may require modification. The checker and designer then work jointly to resolve all discrepancies. The needed plan changes are then revised resulting in the 90% Checked Details plan set.

DELIVERABLES:

- Independent check calculations
- Comment-Resolution verification

TASK 13 – QUALITY CONTROLS REVIEW

Task 13.1 – Quality Controls Review

Quality control reviews will be conducted before the following submittals:

- 65% Plan Submittal
- Draft (90%) PS&E
- Final PS&E

The plans will be reviewed for compatibility between portions of work and design disciplines, including a Road Plan Review as described in the Caltrans Memo to Designers 2-25. The Geotechnical Engineer shall review the retrofit plans prior to the Draft PS&E submittal for compliance with the geotechnical recommendations. CONSULTANT shall perform an independent QA/QC review prior to the submittals listed above being transmitted to the COUNTY.

TASK 14 – DRAFT PS&E (90%)

Task 14.1 – Draft PS&E (90%)

CONSULTANT will develop the bridge retrofit design to the 90% level and respond to comments received from the 65% submittal and resolve any outstanding design issues. CONSULTANT to prepare Bridge Specifications and update Bridge Cost Estimate.

CONSULTANT will perform an independent QA/QC review of the 90% plans, specifications and estimate and incorporate appropriate revisions prior to submittal to the COUNTY. The COUNTY will submit the 90% PS&E package to Caltrans District Local Assistance and to the Caltrans Division of Structures for review of concurrence with the final approved Retrofit Strategy Report, in accordance with Chapter 7 of the Caltrans LAPG.

Plans will be prepared in AutoCAD and Civil3D format. Specifications will be prepared in Microsoft Word and the estimate will be prepared in Microsoft Excel. All electronic submittals will be the original source file accompanied by an electronic plot in PDF format.

Task 14.2 – Specifications

Prior to the Draft PS&E Submittal, the plans will be reviewed by CONSULTANT and an updated contract items list will be produced. The technical specifications will then be compiled using the items list to collect and edit the latest Caltrans Standard Special Provisions (SSP's). CONSULTANT will prepare required technical special provisions. The basis of the specifications shall be the Caltrans Standard Specifications. It is assumed that the COUNTY will prepare the "boiler plate" documents, including the notice to bidders, proposal, bond forms, and agreement. Required mitigation

measures and permitting requirements from the environmental permits will be included in the specifications. COUNTY will assemble the final project contract documents.

Task 14.3 – Engineers Estimate

Two independent sets of bridge quantity calculations will be prepared by individuals experienced in this work. The quantity calculations will be organized and detailed for use by field inspectors during construction. Standard Caltrans summary sheets will be used for bridge and road quantity calculations, aiding in facilitating the review process and use by the construction personnel. Bridge quantity estimators should agree within tolerances prescribed in Chapter 11 of the Caltrans Bridge Design Aids Manual. Any deviations will be resolved and the Marginal Estimate sheet will be prepared.

Unit prices will be applied to each contract item resulting in the Engineer's Estimate of Probable Construction Cost (Estimate). Prices used will be based on the latest available data from the COUNTY and Caltrans, reflecting the location of the project and the quantity of each item. Non-participating costs, if any, will be segregated in the estimate.

DELIVERABLES:

- Five sets 90% Plans (AutoCAD & Civil3D)
- Special Provisions (Word)
- Cost Estimate (Excel)
- Estimated construction schedule (MS Project)
- 90% PS&E submittal package to Caltrans, per Chapter 7 of the LAPG

TASK 15 – PERMIT COMPLIANCE

Task 15.1 – Permit Compliance

Plans and specifications will be checked against the permit conditions and measures to ensure compliance with the agency requirements.

DELIVERABLES

- Tabulated list of permit conditions and where addressed in PS&E

TASK 16 – FINAL PS&E

Task 16.1 – Final Revisions

Upon receipt of comments from the Draft PS&E submittal to the COUNTY, and other jurisdictional agencies, which will be routed through the COUNTY, final revisions will be made. CONSULTANT will incorporate appropriate comments in the plans, specifications, and estimate.

Task 16.2 – Final Submittal

CONSULTANT will incorporate comments and submit final plans, specifications and estimate to the COUNTY. CONSULTANT will perform an independent QA/QC review of the 100% submittal package and incorporate appropriate revisions prior to submittal to the COUNTY.

Final AutoCAD and Civil3D files shall contain all surfaces and alignments used in creating the final plans suitable for use by the County for staking the project.

DELIVERABLES:

- Final Design Plans
- Final technical specifications
- Construction Cost Estimate
- Estimated construction schedule with estimated working days calculation (hardcopy and in MS Project format)
- Resident Engineer's File
- AutoCAD Project Plans on flash drive
- 100% PS&E submittal package to Caltrans, per Chapter 7 of the LAPG

TASK 17 – BID PERIOD CONSULTATION

Task 17.1 – Bid Period Consultation

CONSULTANT will provide bidding assistance to the COUNTY. This will include consultation and interpretation of the contract documents, answering questions from prospective bidders and assisting the COUNTY in preparing addenda to the PS&E during the advertisement period. CONSULTANT will assist the COUNTY by attending pre-bid or pre-construction meetings and bid openings.

DELIVERABLES:

- Prepare Addenda as required
- Respond to RFI's as required

PHASE 3: CONSTRUCTION

TASK 18 – DESIGN SUPPORT DURING CONSTRUCTION ASSISTANCE (OPTIONAL to be paid for by future amendment)

Task 18.1 – Design Support During Construction Assistance

CONSULTANT will provide design and engineering support during construction. This work may include review and response to CONTRACTORS requests for information (RFIs), product submittal reviews, concrete mix design checks, shop drawing review, field observations and review of soil anchor installation plans and shop drawings.

This task assumes the COUNTY or a separate third party will perform Construction Management services including supplying a Resident Engineer (RE), processing change orders, managing the construction schedule and CONTRACTOR's day to day operations, and preparing RE markup as-built drawings. CONSULTANT will prepare record (As-Built) drawings from the RE markup set.

San Luis Obispo County
Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Cost Proposal

Drake Haglan & Associates
CONTRACT SUMMARY

DHA DIRECT LABOR

<u>Person</u>	<u>Hours</u>	<u>Rate</u>	<u>Total</u>
C. Drake	227	\$85.00	\$19,295.00
M. Pugh	32	\$79.00	\$2,528.00
J. Silva	8	\$81.40	\$651.20
T. Dubovick	382	\$65.00	\$24,830.00
J. Elmensdorp	136	\$55.00	\$7,480.00
L. Minor	16	\$26.50	\$424.00
K. Li	148	\$56.10	\$8,302.80
A. Barba	380	\$44.00	\$16,720.00
J. Hildebrandt	36	\$40.00	\$1,440.00
T. Bautista	24	\$33.50	\$804.00
Subtotal Direct Labor:	1389		\$82,475.00
Salary Increases @ annually:			\$0.00

Total: Direct Labor: \$82,475.00

DHA INDIRECT COSTS

<u>Item</u>	<u>Rate</u>	<u>Total</u>
Overhead	84.30%	\$69,526.43
Fringe Benefit	47.30%	\$39,010.68
Total	131.60%	\$108,537.10

Total: Indirect Costs: \$108,537.10

DHA FEE

<u>Amount</u>	<u>Rate</u>	<u>Total</u>
Fee on DL + ICs	10.00%	\$19,101.21

Total: Fee: \$19,101.21

DHA OTHER DIRECT COSTS

<u>Item</u>	<u>Unit</u>	<u>Quantitv</u>	<u>Unit Price</u>	<u>Total</u>
Mileage (6 Trips@550 mile/ea)	Mile	3300	\$0.56	\$1,848.00
Print Full Size Bond (24"x36")	EA	24	\$2.34	\$56.16
Print Full Size Vellum (24"x36")	EA	24	\$20.70	\$496.80
Print Half Size (11"x17")	EA	360	\$0.36	\$129.60
Overnight Delivery (\$15/ea)	EA	30	\$18.00	\$540.00
ASR Coring/Testing/Report	EA	1	\$6,000.00	\$6,000.00
Subtotal:				\$9,070.56

Total Other Direct Costs: \$9,070.56

SUBCONSULTANTS

<u>Subconsultant</u>	<u>Total</u>
Kleinfelder	\$24,714.89
Subtotal:	\$24,714.89

Total Subconsultant Cost: \$24,714.89

Total Contract: \$243,898.76

Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Cost Proposal
Hours/Cost Breakdown

Phase		Task	DHA Staff Hours Detail												DHA Direct Labor / Task		Subconsultant Fees
			Initial Hourly Direct Rate:												DHA Hours	DHA Direct Labor	
1	1	1.1	Scope of Work Task														
		1.2	Project Management (Phase1)			90			16						106	\$ 8,690.00	
		2.1	Progress Meetings (Phase 1)			24			24						48	\$ 3,600.00	
	2	2.1	Kick-Off Meeting			8			8					4	20	\$ 1,334.00	
		2.2	Surveys and Mapping (By COUNTY)												0	\$ -	
		2.3	Bridge Hydraulic Report (By COUNTY)												0	\$ -	
	3	3.0	Environmental Support			1									41	\$ 1,749.40	
	4	4.1	Public Outreach			8			8			32		4	52	\$ 2,742.00	
	5	5.1	Preliminary Utility Coordination						8		16		4		28	\$ 1,551.60	
	6	6.1	Pre-Field Activities												0	\$ -	
		6.2	Field Exploration Program												0	\$ -	\$ 3,050.05
		6.3	Laboratory Testing Program												0	\$ -	\$ 335.70
		6.4	Engineering Analysis and Report Preparation						8		4				12	\$ 744.40	\$ 17,550.74
		7.1	65% Roadway Design								40				40	\$ 2,244.00	
	7	7.2	65% Bridge Retrofit Design and Detailing						164			220			384	\$ 20,340.00	
		7.3	Traffic Design						4		24				28	\$ 1,606.40	
		7.4	Design Exceptions												0	\$ -	
7.5		Dewatering Plans and Water Pollution Control						4		8				12	\$ 708.80		

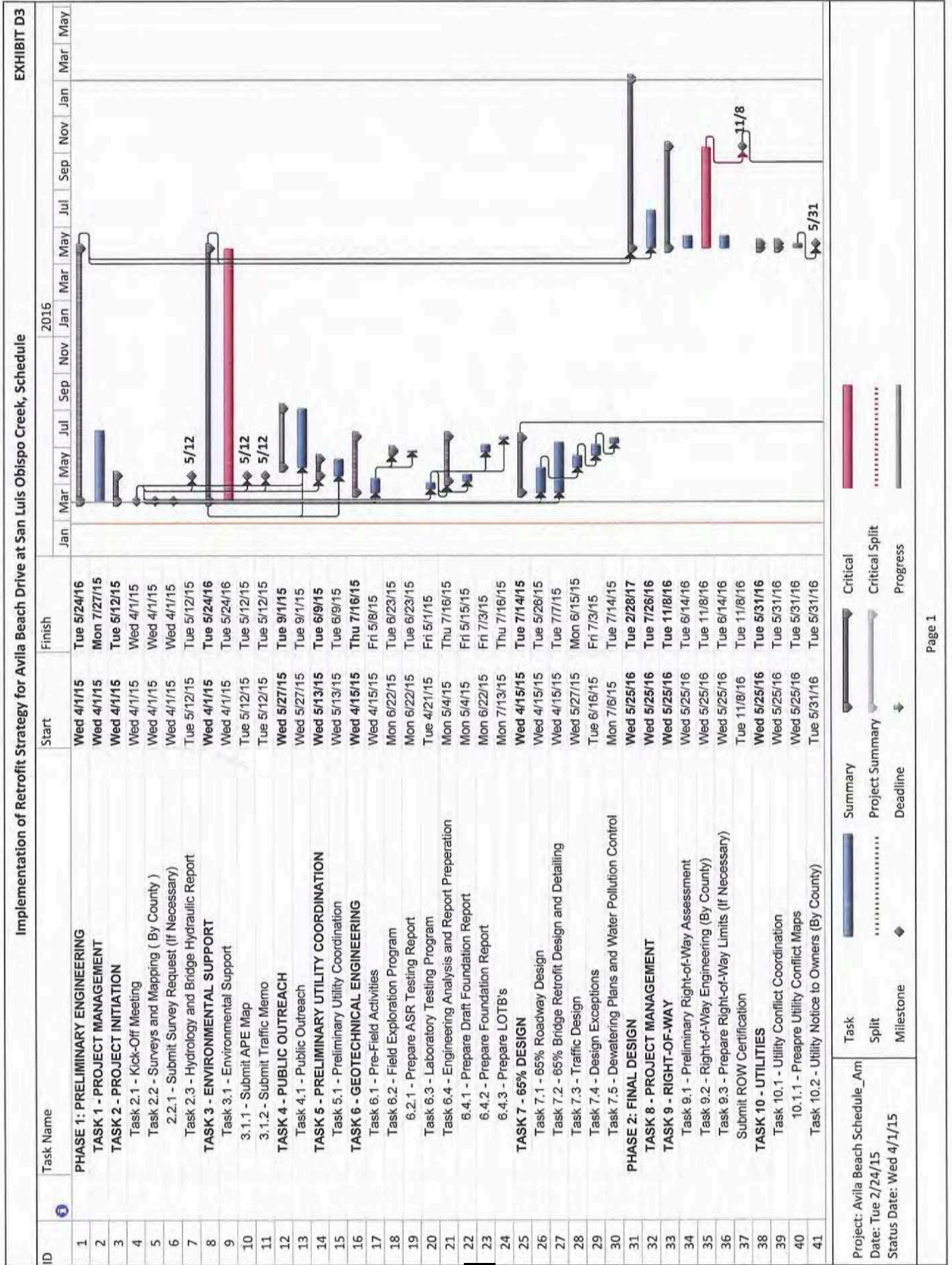
DHA Staff Hours Detail															DHA Direct Labor / Task		Subconsultant Fees
															DHA Hours	DHA Direct Labor Cost	Geotechnical Engineering
Phase	Task	Project Manager	Bridge QC Engineer	Roadway QC Engineer	Bridge Project Engineer	Senior Bridge Engineer	Assistant Bridge Engineer	Roadway Engineer	Bridge CAD	Environmental Coordinator	Project Administration						
2	Initial Hourly Direct Rates:																
	8	8.1	Project Management (Phase 2)	C. Drake	M. Pugh	J. Silva	T. Dubovik	J. Elmensdorp	L. Minor	K. Li	A. Barba	J. Hildebrandt	T. Bautista		60	\$ 4,700.00	Kleinfelder
		8.2		8			8								16	\$ 1,200.00	
	9	9.1	Preliminary Right-of-Way Assessment							32					32	\$ 1,795.20	
		9.2													0	\$ -	
	10	10.1	Right-of-Way Engineering (By COUNTY)												16	\$ 1,040.00	
	10.2													16	\$ 1,040.00		
	11	11.1	Utility Conflict Coordination												20	\$ 1,006.00	
	11.2	65% Plan Submittal								8		4		80	\$ 4,400.00		
	12	12.1	Bridge Design Check												40	\$ 3,179.20	
	13	13.1	Quality Controls Review		32	8									60	\$ 3,030.80	
	14	14.1	Draft PS&E (90%)				16			8	32	4			44	\$ 2,460.00	
		14.2		Specifications				4							36	\$ 1,528.40	
	15	14.3	Engineers Estimate				16			4					6	\$ 470.00	
		15.1	Permit Compliance	4			2								44	\$ 2,320.40	
	16	16.1	Final PS&E Revisions				16			4	24				36	\$ 1,922.40	
16.2		Final Submittal	4			8			4	16	4			36	\$ 1,922.40		
3			Subtotal Base Hours/Costs:		187	32	8	342	136	16	148	332	36	24	1261	\$ 74,363.00	\$ 20,936.49
	17	17.1	Bid Period Consultation (Optional)	16			16			16				48	\$ 3,104.00	\$ -	
	18	18.1	Design Support During Construction (Optional)	24			24				32			80	\$ 5,008.00	\$ -	
			Subtotal Optional Hours/Costs:		40	0	0	40	0	0	0	48	0	128	\$ 8,112.00	\$ -	
			Total Hours/Costs:		227	32	8	382	136	16	148	380	36	24	1389	\$ 82,475.00	\$ 20,936.49
Subconsultant Other Direct Costs															\$	1,678.40	
3rd Tier Subconsultants															\$	2,100.00	
Total Subs Cost															\$	24,714.89	

Implementation of Retrofit Strategy for Avila Beach Drive Bridge at San Luis Obispo Creek, Organizational Chart



Drake Haglan & Associates
Craig Drake, PE <i>Project Manager</i>

PROJECT TEAM			
Drake Haglan & Associates <i>Bridge Design</i>	Drake Haglan & Associates <i>Civil Design</i>	Drake Haglan & Associates <i>Environmental</i>	Kleinfelder <i>Geotechnical</i>
Tony Dubovik, PE <i>Bridge Project Engineer</i> Jeff Elmsdorp, PE Luke Minor Alex Barba, (CAD) Michael Pugh, PE (QC)	Kerwin Li, PE <i>Roadway Engineer</i> Jose Silva, PE (QC)	Jennifer Hildebrandt <i>Environmental Coordinator</i>	David Pearson, PE, GE Zia Zafir, Ph.D., PE, GE Nathan Dahlen, PE Neva Popenoe, PE
Drake Haglan & Associates Theresa Bautista <i>Project Administrator</i>			



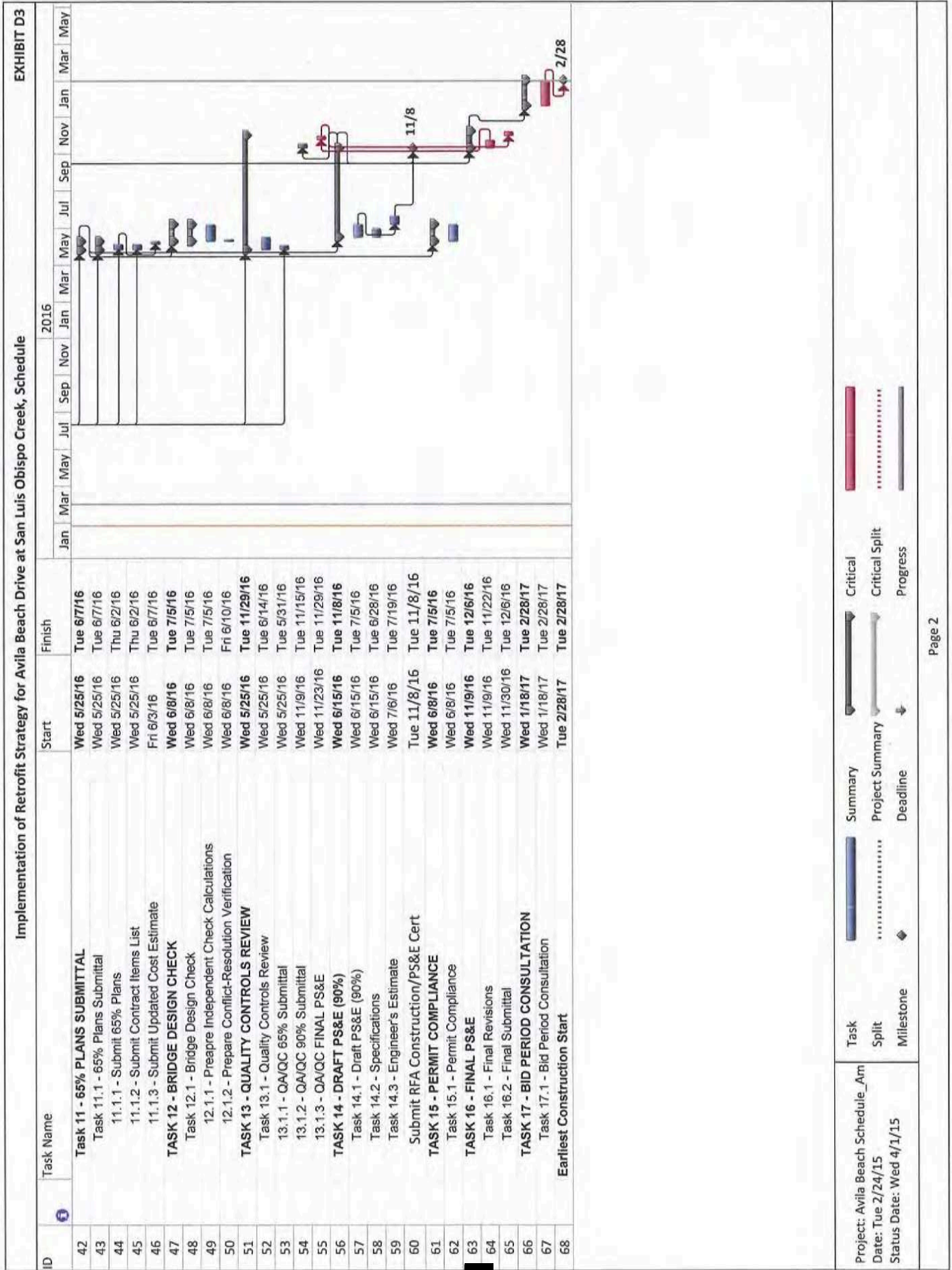
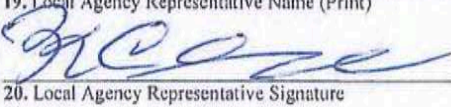
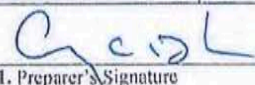


EXHIBIT 10-01 CONSULTANT PROPOSAL DBE COMMITMENT

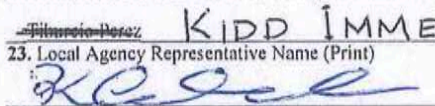
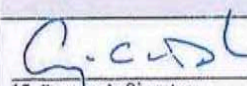
(Inclusive of all DBEs listed at bid proposal. Refer to instructions on the reverse side of this form)

Consultant to Complete this Section			
1. Local Agency Name: <u>San Luis Obispo County</u>			
2. Project Location: <u>over San Luis Obispo Creek in the community of Avila Beach</u>			
3. Project Description: <u>Professional services for the Avila Beach Dr. Bridge No. 1 State Bridge No. 49C-327 Seismic Retrofit</u>			
4. Consultant Name: <u>Drake Haglan & Associates</u>			
5. Contract DBE Goal %: <u>1%</u>			
DBE Commitment Information			
6. Description of Services to be Provided	7. DBE Firm Contact Information	8. DBE Cert. Number	9. DBE %
Drilling	Woodward Drilling (707) 374-4300 550 River Rd, Rio Vista, 94571	37887	3.57 %
Traffic Control	Alert-O-Lite (559) 453-2474 P.O. Box 12224, Fresno, CA 93777	16345	3.75 %
<b style="text-align: center;">Local Agency to Complete this Section 16. Local Agency Contract Number: <u>300456</u> 17. Federal-aid Project Number: <u>BHLS-5949(136)</u> 18. Proposed Contract Execution Date: _____ Local Agency certifies that all DBE certifications are valid and the information on this form is complete and accurate: <u>Theresa Perry KIDD IMMEL</u> 19. Local Agency Representative Name (Print) <u></u> 20. Local Agency Representative Signature <u>Contract Manager</u> 22. Local Agency Representative Title		10. Total % Claimed <u>7.35</u> % <u></u> 11. Preparer's Signature <u>Craig C. Drake</u> 12. Preparer's Name (Print) <u>CFO/Project Manager</u> 13. Preparer's Title <u>2/18/15</u> 14. Date <u>(916) 363-4210</u> 15. (Area Code) Tel. No.	
<u>2/25/15</u> 21. Date <u>5981</u> (805) 781- 5981 23. (Area Code) Tel. No.			

Distribution: (1) Original – Consultant submits to local agency with proposal
 (2) Copy – Local Agency files

EXHIBIT 10-02 CONSULTANT CONTRACT DBE INFORMATION

(Inclusive of all DBEs listed at contract award. Refer to instructions on the reverse side of this form)

Consultant to Complete this Section			
1. Local Agency Name: <u>San Luis Obispo County</u>			
2. Project Location: <u>over San Luis Obispo Creek in the community of Avila Beach</u>			
3. Project Description: <u>Professional services for the Avila Beach Dr. Bridge No. 1 State Bridge No. 49C-327 Seismic Retrofit</u>			
4. Total Contract Award Amount: <u>\$ 403,006.76</u>			
5. Consultant Name: <u>Drake Haglan & Associates</u>			
6. Contract DBE Goal %: <u>1%</u>			
7. Total Dollar Amount for all Subconsultants: <u>\$ 62,024</u>			
8. Total Number of all Subconsultants: <u>3</u>			
Award DBE/DBE Information			
9. Description of Services to be Provided	10. DBE/DBE Firm Contact Information	11. DBE Cert. Number	12. DBE Dollar Amount
Drilling	Woodward Drilling Inc. (707) 374-4300	37887	\$14,400
Traffic Control	Alert-O-Lite (559) 453-2474	16345	\$15,120
Local Agency to Complete this Section		13. Total Dollars Claimed	12. DBE Dollar Amount
20. Local Agency Contract Number: <u>300456</u>			\$ <u>29,520</u>
21. Federal-aid Project Number: <u>BHLS-5949(136)</u>			
22. Contract Execution Date: _____		14. Total % Claimed	<u>7.32</u> %
Local Agency certifies that all DBE certifications are valid and the information on this form is complete and accurate:		<div style="text-align: center; font-size: 2em; margin-bottom: 10px;">  </div> <div style="text-align: center; font-size: 1.5em; margin-bottom: 10px;">  </div>	
23. Local Agency Representative Name (Print) <u>KIDD IMMEL</u>			
24. Local Agency Representative Signature <u>[Signature]</u>			
25. Date <u>2/25/13</u>			
26. Local Agency Representative Title <u>Contract Manager</u>			
27. (Area Code) Tel. No. <u>(916) 781-5981</u>		15. Preparer's Signature <u>Craig C. Drake</u>	
28. DLAE Name (Print) _____		16. Preparer's Name (Print) <u>Craig C. Drake</u>	
29. DLAE Signature _____		17. Preparer's Title <u>CFO/Project Manager</u>	
30. Date _____		18. Date <u>2/18/15</u>	
		19. (Area Code) Tel. No. <u>(916) 363-4210</u>	
Caltrans to Complete this Section			
Caltrans District Local Assistance Engineer (DLAE) certifies that this form has been reviewed for completeness:			

- Distribution:** (1) Copy – Email a copy to the Caltrans District Local Assistance Engineer (DLAE) within 30 days of contract award. Failure to send a copy to the DLAE within 30 days of contract award may result in delay of payment.
 (2) Copy – Include in award package sent to Caltrans DLAE
 (3) Original – Local agency files